



# Object-Oriented Design with UML

---

Length: Two days

Level: Advanced

---

## DESCRIPTION

Students will be given an analysis model as the starting point for the course. The purpose of this course will be to instruct students on how to optimize a design model for a specific development environment. The course will address some advanced design topics such as architectural issues, patterns, implementation mechanisms, and tips on optimizing the design model.

---

## OBJECTIVES

Upon completion of the course, participants will be able to:

- Apply an iterative, use case-driven, architecture-centric process to the development of a robust design model.
  - Use the UML to represent the design model.
  - Apply the concepts of abstraction, encapsulation, inheritance and polymorphism.
  - Understand the different views of software architecture, the key mechanisms that are defined in support of that architecture, and the effect of the architecture and mechanisms on the produced design.
  - Describe some basic design considerations, including the use of patterns.
-

## TOPICS

- Overview of Object Orientation Concepts
  - Overview of Requirements and Use Cases
  - Overview of Analysis and Design activities
  - Identify Design Elements
  - Identify Design Mechanisms
  - Describe the Run-time Architecture (Concurrency)
  - Describe Distribution
  - Use Case Design
  - Subsystem Design
  - Class Design
  - Persistency
- 

## AUDIENCE

- Software Developers
- 

## PREREQUISITES

- Course *Object Oriented Analysis with UML* or equivalent